The DiabEase Initiative Empowering Diabetes Management During Ramadan

By: Mdm. Saliha Azlan & Dr. Gurmeet Kaur Surindar Singh



Diabetes management presents unique challenges during Ramadan, particularly for individuals who observe fasting. In Malaysia, where a substantial segment of the population participates in this practice, effective managing medication and maintenance of glycaemic control are essential. In response to this issue, a research team from the Faculty of Pharmacy, UiTM Puncak Alam, has initiated a project to develop a mobile application titled DiabEase.

The DiabEase project focuses on empowering diabetes patients with tailored support to navigate fasting while managing their condition effectively. The initiative responds to the pressing need for practical, patient-centered resources, as no existing mobile applications cater specifically to medication adjustments during Ramadan. The app will integrate clinical guidelines, expert recommendations, and user feedback to offer comprehensive features such as medication tracking, dosage adjustment calculators, and educational content on managing diabetes while fasting.

The research encompasses several key objectives: assessing patients' knowledge and practices related to diabetes management during Ramadan, developing a user-friendly mobile solution, and evaluating user satisfaction. A pilot study involving 30 participants will evaluate the app's usability and effectiveness. The project aligns with Malaysia's National Healthcare Quality Policy 2022-2026 and supports the United Nations Sustainable Development Goal 3: Good Health and Well-being.

One of the core innovations of DiabEase lies in its ability to guide users in adjusting medication dosages based on fasting schedules, a feature absent from currently available apps. Additional functionalities include monitoring blood glucose levels, offering reminders, and providing nutritional advice tailored to Ramadan. The app's content will undergo rigorous validation by a panel of experts, ensuring its reliability and relevance.

Ultimately, this research aims to improve health outcomes and quality of life for diabetic patients during Ramadan. By combining technology and evidence-based practices, the DiabEase initiative underscores UiTM's commitment to fostering impactful research that addresses real-world health challenges. This project not only has the potential to enhance patient care but also positions UiTM as a player in digital health innovation.

Project Members



Principal Investigator: Mdm. Saliha Azlan















Members:

Professor Dato' Dr. Abu Bakar Abdul Majeed, Assoc. Prof. Dr. Yuslina Zakaria, Dr Nur Wahida Zulkifli, Mdm. Farhana Fakhira Ismail, Ms. Nik Aisyah Najwa Nik Mustaffa Shapri, Mdm. Nik Ateerah Rasheeda Mohd Rocky, Mdm. Nur Sabiha Md Hussin